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FILING DATE APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/516,931 12/14/2004 · Fumio Yamakawa 262632US0XPCT 7387 EXAMINER 22850 10/07/2005 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. RABAGO, ROBERTO 1940 DUKE STREET ART UNIT PAPER NUMBER ALEXANDRIA, VA 22314 1713

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/516,931	YAMAKAWA ET AL.
Office Action Summary	Examiner	Art Unit
	Roberto Rábago	1713
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		•
1) Responsive to communication(s) filed on		
	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
<ul> <li>4) ☐ Claim(s) 1.2 and 4-7 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> </ul>		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1,2 and 4-7</u> is/are rejected.		
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.		
o) Claim(s) are subject to restriction and/or election requirement.		
Application Papers	•	
9) The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		•
1) X Notice of References Cited (PTO-892)	4) Interview Summary	(PTO 413)
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 2/12/04.</li> </ul>	Paper No(s)/Mail Da	(PTO-413) ate atent Application (PTO-152)

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kukes et al. (US 5,151,172).

The reference teaches in claims 1, 5 and 6 a process for the hydrogenation of hydrocarbons in the presence of sulfur, comprising a supported catalyst comprising palladium and platinum in a weight ratio range of 5:1 to 1:2 and a quantity of 0.1 to 2% of each component. The claimed ratio of 2.5:1 to 3.5:1 amounts to approximately one-fifth of the range disclosed in the reference, and the claimed mass quantities are substantially coextensive with those disclosed in the reference; therefore, the claims are anticipated because one of ordinary skill in the art would immediately envisage the claimed ranges from those disclosed.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kukes et al. (US 5,151,172) in view of Azuma et al. (US 4,540,480).

The parent claim is discussed with respect to Kukes above. Missing from Kukes is a disclosure to use the disclosed hydrogenation catalyst with petroleum resin. However, as shown in Azuma, the use of catalysts comprising supported Pt/Pd catalysts for the hydrogenation of such resins is well known in the art, and therefore one of ordinary skill in the art would be motivated to use the catalyst of Kukes for the hydrogenation of petroleum resins. Reasonable success would be expected, including hydrogenation of resins comprising sulfur, because both Azuma and Kukes have disclosed that such catalysts are effective in the presence of sulfur (Azuma col. 2, lines 40-64; Kukes claim 6).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberto Rábago Primary Examiner

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RR September 30, 2005